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### (54) AUTO-BALANCING DEVICE WITH LONGITUDINALLY DISPOSED AND MOVABLE PLATFORM SECTIONS

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#### (57)**ABSTRACT**

An auto-balancing transportation device configured for being ridden in a foot forward or sideways standing position. The rider platform has front and rear foot platform areas and two connecting members, located on opposite lateral sides of the device, that couple the front and rear platform areas. Two drive wheels are located under or through the platform. The front and/or rear platform areas are movable or twistable so as to alter the fore-aft tilt of one or more of the connecting members. Position sensors associated with each connecting member are used to drive a corresponding drive wheel. In this manner, differences in fore-aft tilt angle of the two connecting members achieves a turning of the device.

